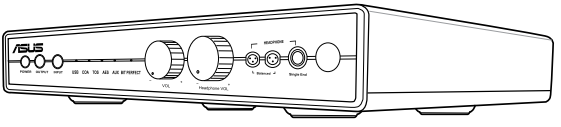
Q8395

Essence 3

Hi-Fi USB DAC (Digital-to-Analog Converter)

Opamp Swap Guide



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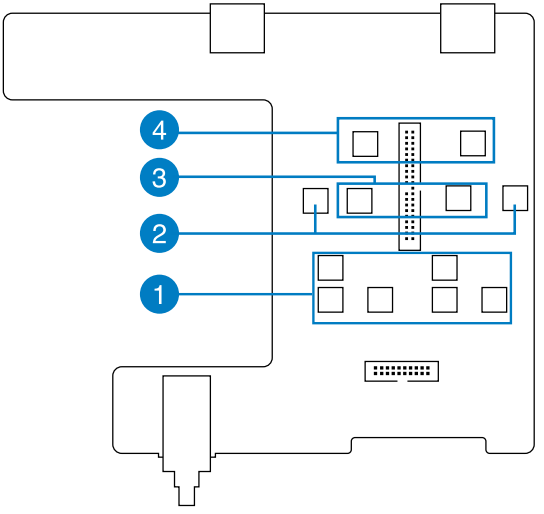
An operational amplifier (op-amp) plays an important role in audio performance and tonal style by creating a distinct listening experience. Catering to the needs of audiophiles, the Essence series streamlines op-amp modifications with easily-swappable op-amp sockets.

1. Swap guide

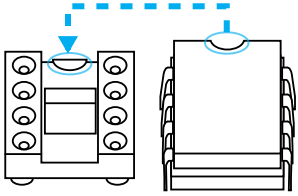
Replace op-amps with the same type for the corresponding slot. For example, if you need to change DAC I/V, replace the op-amp with a DAC I/V op-amp in slot 1. If you need to change SE LPF, you need to replace the op-amp with the same type of op-amp in slot 2.

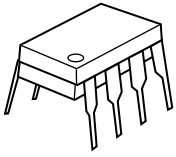


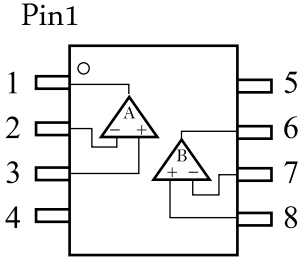
NO.	Items
1	DC Servo
2	XLR Buffer
3	I/V
4	SE LPF

2. Instructions on swapping Op-Amps

1. Use an IC clamp to clasp an op-amp and remove it vertically upwards.
2. Replace the op-amp with a similar type of op-amp from the op-amp kit.





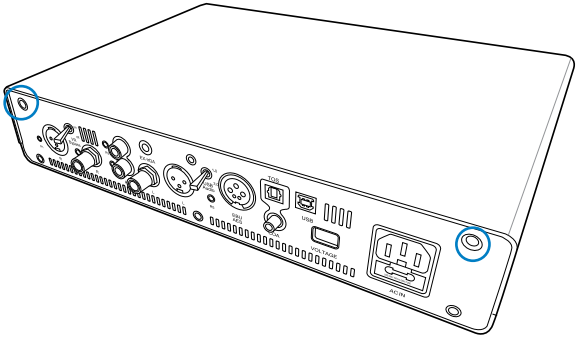


NO.	Pin Function
1	A OUTPUT
2	A-INPUT
3	A+INPUT
4	V
5	B+INPUT
6	B-INPUT
7	B OUTPUT
8	V^+

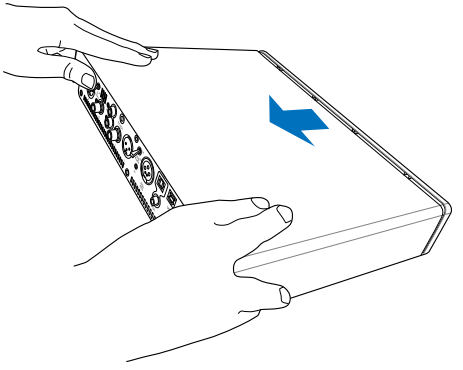
Ensure that the half-moon opening on the op-amp points to the same direction as that of the socket.

3. Disassembly

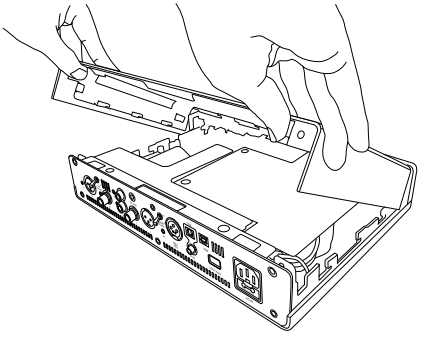
1. Remove two screws from the rear panel.



2. Place your thumbs on the rear panel and your fingers on the top cover. Slide the cover towards you to disengage the top cover from the chassis.

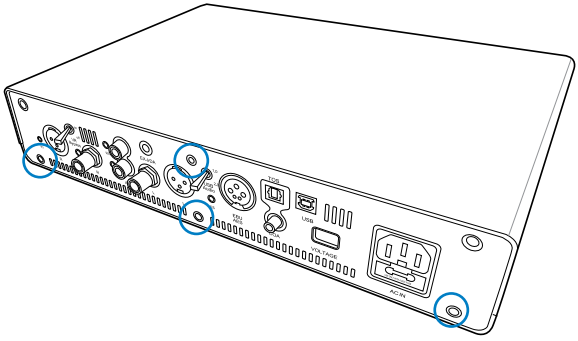


3. Gently lift up the top cover.

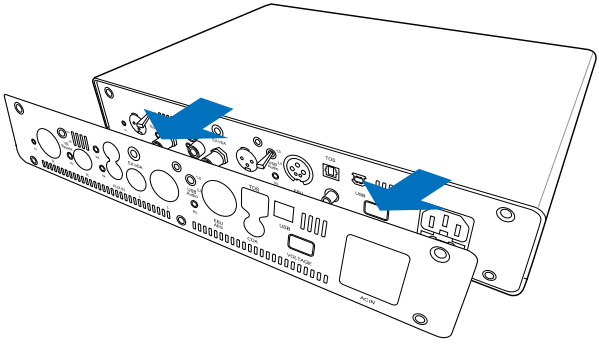


Follow step 4 only if you need access to buffer op-amps on the analog board.

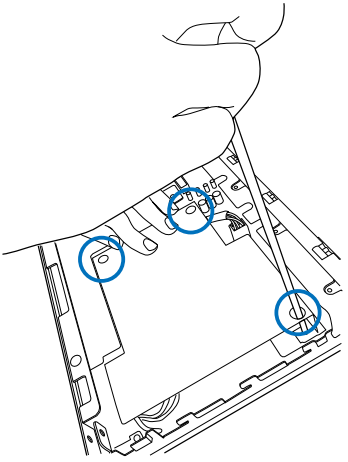
4. Remove four screws from the rear panel.



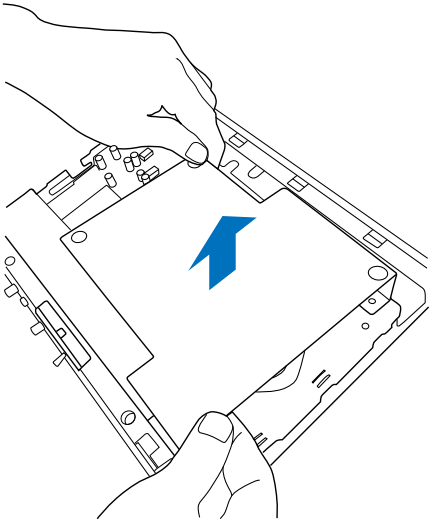
5. Remove the rear panel.



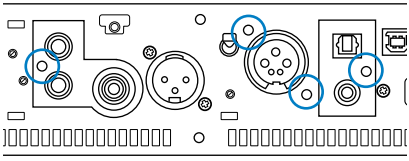
6. Unscrew the silver chassis panel.



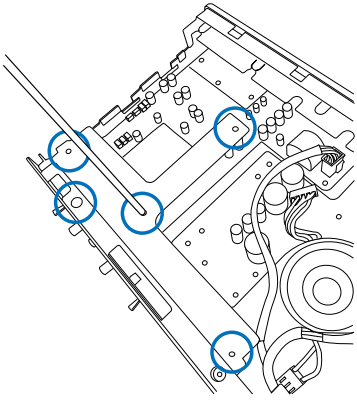
7. Remove the silver chassis panel.



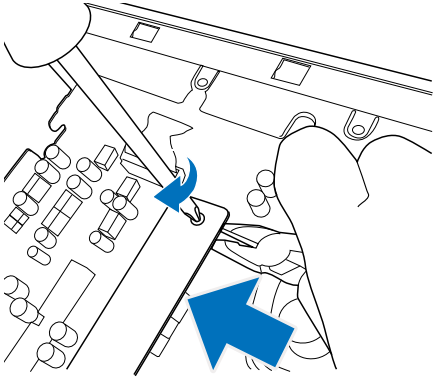
8. Unscrew the four screws as indicated on the inner rear panel.



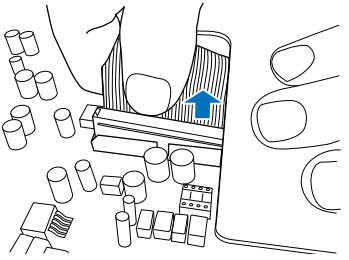
9. Unscrew the upper layer PCB board.



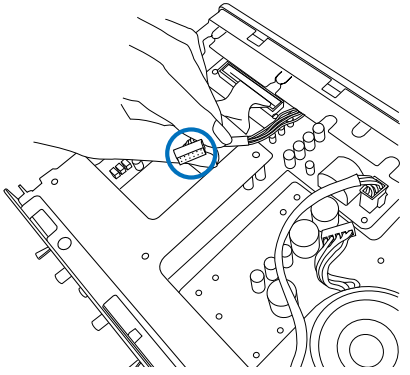
Use a pair of pliers to secure the stools underneath the PCB board as you turn the screws.



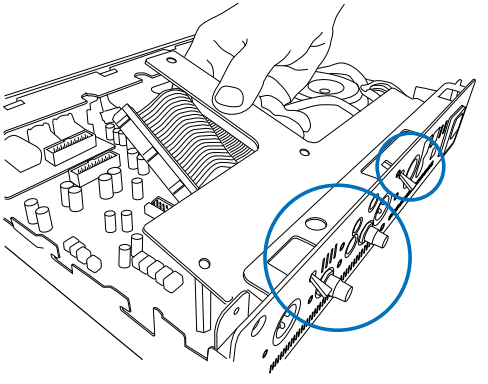
10. Disconnect the ribbon cable.



11. Disconnect the cable as shown below.



12. Gently lift and slide the PCB board from the chassis. Take care when removing the board away from the Bypass switch and RCA jacks.



4. Op-amp pairing impression

Recommended op-amp pairing combinations

Brand	Model name
NS	LME49860
NS	LME49720NA
NS	LM4562NA
TI	OPA2111
TI	OPA2132
TI	OPA2107
ADI	OP275
ADI	AD823
NJRC	MUSE01
NJRC	MUSE02
ADI	AD827SQ
TI	OPA2227P
TI	OPA2227PA

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(d) obsolescence;

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